

AFRD ES&H Operations Committee
71J Conference Room
January 11, 2008
2:00 – 3:00 PM

Minutes

Attendees: Ken Barat, Richard DeBusk, Jim Floyd, Daryl Horler, Neil Landau, Steve Lidia, Tom McVeigh, Tom Scarvie, John Seabury, Pat Thomas, Csaba Toth

1. Group Job Hazards Analysis – John Seabury

Job Hazards Analysis is a new form of work authorization that will describe tasks, hazards, and controls for work performed by an individual or group. The JHA will answer the question, “How do you know how to do your job safely?” The JHA fills the authorization gap between formal authorizations, such as AHDs and RWAs, for high-hazard work and low-hazard, everyday tasks commonly performed by the general public. JHAs will not be required for work on the UC campus or at other DOE labs. Work at other off-site locations will be included. Individual JHAs will be required for people working at LBNL for >30 days, the same as the existing JHQ. There will be an annual reauthorizations requirement.

The first step in preparing a JHA is defining the types of work done, the hazards involved, and the required EHS training courses. This is similar to the existing JHQ process. The JHA will take the analysis a step further and define other types of hazard controls, such as PPE, guarding, on-the-job training, etc. Group JHAs will be created by work leads or supervisors for their work groups. The person who “owns” each group JHA should be a technical expert who is familiar with the work and can analyze the hazards. A work group consists of people who do work with similar tasks, hazards, and controls. Subject matter experts can help the JHA owners to define hazards and controls. There will probably be some general group JHAs developed with Lab-wide applicability, such as administrative/financial work or machine shop work. Divisions can customize these general JHAs for their own groups.

There will be software to assist in preparing the JHAs. It is almost, but not quite, ready for use yet. John Seabury hopes to be able to provide a demonstration soon.

To create an individual JHA, the worker answers JHQ-type questions and then “subscribes” to one or more work groups. The worker then meets with the Supervisor/ Work Lead(s) to discuss and sign the JHA. The signed JHA authorizes the work.

John Seabury is asking each Division to provide a preliminary list of group JHAs by January 22. He recognizes that the list will change as we start developing the group JHAs and decide to combine or split groups. We will be developing group JHAs during February – May 2008. We should continue using the existing JHQ system until the JHA

system is fully implemented. The contract performance measure is to have 75% of individual JHAs developed during June – September 2008.

2. ES&H News and Lessons Learned

- **QUEST** will begin at our next (February 1st) meeting for all Programs except ALS Accelerator Physics. Please review the draft QUEST Guide and send your comments to Pat Thomas by January 25th. The most significant change this year is a new Lockout/Tagout inspection process to comply with PUB-3000. There is also a new environmental management checklist that combines two previous checklists -- the QUEST waste minimization checklist and the environmental management discussion checklist. Please work with your Program Head to organize your QUEST teams.
- **Supervisor Safety Plan** activity reports for the period of October 1 – December 31, 2007 are due to Pat Thomas. Thank you to LOASIS for already completing their report
- A DOE (Oak Ridge) **electrical safety audit** of LBNL is coming the week of February 4-6. This time, the auditors are going to review our understanding of electrical safety requirements and procedures. AFRD has been asked to provide the names of 4 to 6 researchers to be interviewed. We have 2 volunteers so far.
- There are three changes to **hazardous waste management** that will affect our Satellite Accumulation Areas. (1) It is no longer necessary to collect halogenated and non-halogenated solvents in separate containers. (It used to be more expensive to treat the halogenated solvents, but now they cost about the same.) (2) EHS would like to eliminate the paper requisition forms and switch to an all-electronic system by January 1, 2009. (3) EHS would like to replace the 5-gallon carboys, and 5 gal flam cans with smaller versions, such as 2.5 gal or 1 gal containers, to minimize the risk of back injuries. This would require more frequent pickup by our staff and increased waste requisitions by waste generators. EHS would provide a recommendation for purchasing the smaller carboys and would continue to provide the reusable flammable waste containers. If you have questions or concerns about any of these changes, please contact Maram Kassis.
- **Storm impacts** – AFRD did not appear to suffer any significant storm damage, other than the usual roof leaks and the power outage that affected most of the site. People in some areas of the Lab noticed emergency light malfunctions during the power outage. We will be checking emergency lights (where they are easily accessible) during QUEST. There were also problems with people not being allowed to come back to the Lab from off-site, computer systems going down, and the telephone operator not being able to look up numbers in the directory. All these issues will be discussed at the January 29 Building Manager and Emergency Team seminar.
- The **seismic safety** status of Bldg. 16 and the 71north annex office wing have been found to be “Poor”. Only “Very Poor” ratings require people to move

out, so no one will be moving. Fred Angliss and Mike Wisherop held briefings for residents of 16 and 71 north to describe the structural problems and review emergency procedures.

3. Program Forum

Supercon completed the HD2 magnet prototype, which may be ready for resting in early February. The LARP reassembly will be going to CERN. Supercon people are interested in learning more about a magnet incident on the UC Campus January 2nd. We don't have any official information yet. John Seabury has been asked to serve on the investigation committee. He will be providing more information as it becomes available, and may be asking some Supercon people for assistance.

ALS Accelerator Physics is including visitors and personnel from other Programs are included in appropriate Experimental Summary Sheets for work at the ALS. Warren Byrnes is acting as the host.

EHS Liaison Ken Barat predicted that more procedures will be required for vendors working on equipment containing lasers. He also asked if anyone knows what happened to an RF meter that is missing from the ALS, and reminded everyone not to "borrow" equipment without first asking the owner.

Next Meeting:

February 1, 2008, 2:00 PM, Bldg. 71J Conference Room -- QUEST Kickoff!

AFRD ES&H Operations Committee
71J Conference Room
February 1, 2008
2:00 – 3:00 PM

Minutes

Attendees: Ken Barat, Daryl Horler, Steve Lidia, Tom Scarvie, Peter Seidl, Pat Thomas, Csaba Toth

1. ES&H News and Lessons Learned

- **Lessons Learned:** Please be aware that as many as a half-million **counterfeit Square D circuit breakers** may have entered U.S. markets since 2005. Anyone who has research equipment with built-in circuit breakers is advised to check for signs of counterfeiting. Actual Square D circuit breakers have (a) the amp rating written on the handle in white paint on the front of the breaker (or, if manufactured before 1999, molded into the handle), (b) the Square D insignia molded onto the breaker side, and (c) a yellow chromate mounting clip with half of the top clip visible. If you find any breakers that look suspicious, please take the equipment out of service and contact Keith Gershon at ext. 4694. Counterfeit breakers may not provide the rated current interrupting capacity and containment features of an authentic breaker, so that an electrical surge could result in an explosion or fire.
- A DOE **electrical safety audit** will occur next week (February 4 – 8). The auditors are interested in seeing some AFRD research areas and talking to people about our electrical safety practices. We are also anticipating a **laser safety audit** in late June 2008. The scope of this audit has not been determined.
- **QUEST** starts today. The 2008 QUEST Guide has been posted on the AFRD web site. Keith Gershon will be providing a training session on February 6 for the people who will be doing the Lockout/Tagout Procedure inspections. The LOTO inspectors must be people who have completed the LOTO class. They will be asked to evaluate the procedures for areas where they do not perform LOTO themselves. Pat Thomas will be scheduling a CATS training class for the QUEST team leaders to encourage them to enter their findings into CATS and track them to completion. Please send the names of your Program's QUEST team leaders and LOTO inspectors to Pat as soon as possible. The goal is to complete the QUEST activities by our next meeting on March 7. If supervisors participate in QUEST assessments or meetings, they can take credit for these activities in their next Supervisor Safety Plan report.

2. Program Forum

CBP's QUEST team leaders will be Miguel Furman (theory group in 71B), John Byrd (71J and laser lab), and Adam Bradford (office and common areas).

Supercon is setting up for the HD2 magnet test. This is a dipole magnet that is part of the research and development program.

LOASIS is looking forward to having a new cooling tower. There will be some pressure fluctuations and temporary shutdowns of cooling water during the construction. They are still having some problems with dust getting into the laser labs during the building construction. The RWA for LOASIS is in the process of being renewed.

The Fusion part of **FS&IBT** plans to revive the Source Test Stand and will be updating the AHD. HCX seismic retrofitting is in progress and is expected to be completed about the end of February. They are getting a cost estimate on improving the safety of the crane rails in the HCX area. Bldg. 58 mechanical engineering supervisor Bill Gath plans to retire July 1st.

ALS Accelerator Physics reports that the radiation safety staff at the ALS is being reorganized. ALS has recently conducted a safety culture survey. Our committee should take a look at it and decide whether AFRD should do a similar survey.

Next Meeting:

March 7, 2008, 2:00 PM, Bldg. 71J Conference Room -- QUEST results!

AFRD ES&H Operations Committee
71B-290 Conference Room
March 7, 2008
2:00 – 3:00 PM

Minutes

Attendees: Ken Barat, Stefano De Santis, Daryl Horler, Steve Lidia, Tom McVeigh, Tom Scarvie, Peter Seidl, Pat Thomas

1. ES&H News and Lessons Learned

- **Group Job Hazards Analyses** – John Seabury will begin working with our initial set of supervisors/work leads this month to develop group JHAs.
- **DOE staff changes** – The Berkeley Site Office has some new people that will be shared with SLAC. Their assignments have not been fully defined yet.
- **Door signs** – EH&S has provided an electronic version of the hazard placards for shop and lab doors. There are several hazard icons you can select and drag to the sign template. Icons for some AFRD hazards have not been created yet, but you can insert a text box to describe additional hazards. The nanomaterials hazard icon will be changed because most nanomaterials are not as hazardous as the icon implies. You can modify the contact person information fields to provide the most useful information for your area. For some rooms with multiple experiments, you will want to list one overall responsible person, and then the PIs/Work Leads for each experiment. Providing home phone numbers is optional, not required. You can print the sign on a color printer, slip it into a plastic protective sleeve, and post it to the door. The electronic format will make it easier to update the signs as people and hazards change. The electronic templates, icons, and instructions will be e-mailed to Program Safety Coordinators after the meeting.
- **Safety Culture Survey** – ALS recently conducted a safety culture survey. They provided us with a copy of their survey questions. Some of our committee members expressed an interest in doing a similar survey at AFRD. The ALS survey has some good questions but it may be a little longer than we would like. It will be sent to committee members after the meeting for your review and consideration. At our next meeting, we can discuss whether we want to do a survey.
- **Laser Safety** – Ken Barat created a “Laser Safety at a Glance” sign that he is distributing to all laser AHD owners. It contains useful information such as emergency actions, information resources and contact people, training requirements, eye exam scheduling, beam blocking requirements, categories of laser users, authorizations, compliance items, laser inventory, and free items available. Ken Barat also reminded us that a DOE laser safety audit is expected in June. It is important that laser owners ensure that their lasers are included in the laser inventory. Ken is notified when a laser is acquired through Procurement or is added to the inventory. When a laser is brought on site from campus or another lab, he does not know about it unless it is added to the inventory or the owner

informs him. Ken also emphasized that it is important for laser owners to test their interlock systems at least every 6 months.

- **Lessons Learned: wastewater/stormwater discharge** – A recent “Today at Berkeley Lab” article contained a link to a fact sheet about Berkeley Lab’s wastewater discharge permit. East Bay Municipal Utility District (EBMUD) strictly limits the substances we discharge to our sinks and sewers. Both LBNL and EBMUD monitor the discharge water. Chemicals in the water system can be hazardous to downstream workers and the environment. Discharges to storm drains can be a problem also. Recently, a construction contractor filled up the diesel tank on their truck and left it parked on a slope above Bldg. 71. An alert employee noticed some diesel leaking from the truck into a stormwater drain and reported it immediately. We were able to stop the discharge before it reached an ORPS-reportable level, and EH&S was able to pump out the spilled material before it reached the offsite environment. The employee who reported the spill received a Spot Award.

2. Program Forum & QUEST results

FS&IBT – Tom McVeigh reported that **IBT** found that having “new eyes” look at Bldg. 5 during QUEST resulted in finding some issues they hadn’t noticed before. For example, they noticed some heavy items stored on shelves with glass doors. He also found it interesting to look at the safety systems for the Supercon experiments while doing the LOTO procedure reviews. Peter Seidl reported that **Fusion** teams did their QUEST assessments on February 28th, looking at offices and labs. They have started entering findings into the CATS database. They want to improve housekeeping in their labs in the 58 complex by having designated clean-up days. They are looking whether the HCX inductor needs better seismic securing.

Supercon – The 4 QUEST teams mostly found routine clean-up items. They are still working on the LOTO reviews.

ALS Accelerator Physics – They will be doing QUEST later in the year with the ALS staff. ALS just went through a major Basic Energy Sciences review, which seemed to go well.

LOASIS – Csaba Toth reported that they have regular “clean –up days” and performed their QUEST assessments in conjunction with one of these days. They are still working on their reports. They had a question about whether there are enough fire extinguishers for the 71 trailer area. Csaba suggested having a fire extinguisher in side 71J, near the food preparation area. They also decided to check the grounding on a magnet.

CBP – New CBP Program Safety Coordinator Stefano De Santis said that they found that too much water is being delivered to the partially inactive areas of

Bldg. 71 and a surplus is building up. They also had questions about which doors are required to open outwards.

Next Meeting:

April 4, 2008, 2:00 PM, Bldg. 71J Conference Room